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THE QUANTITATIVE PRONUNCIATION OF LATIN, AND ITS MEANING FOR LATIN VERSIFICATION¹

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I plan to treat my subject as briefly as possible in the first attack, and in a form in which teachers could put it orally before intelligent young students (of whom there are many). I use the word "attack" advisedly, for this paper is merely the continuation of a thirty-year-old contention of mine in behalf, as it seems to me, of literary feeling and sound science. We inherited a bad pronunciation of Latin prose, and changed it for a better one, which we carry out badly, losing half, or perhaps all, of the pleasure we might have. We inherited an artificial reading of Latin verse, built upon a pronunciation confessedly wholly different from that of the Roman poets; and all the absurdities of this system have been carried over into our present one. Our reading of Latin verse is hard work, unpleasant work, and worse than a waste of time. It *might* be easy, charming, and an aid to the enjoyment and love of literature. The reform has already made a good start. When I made my break with tradition nobody else in the world, so far as I knew, read Latin verse in the way in which I believed the Romans read it,² and the school texts gave no help to quantitative pronunciation after the first year. Today practically all American texts afford the desired aid, and the number of people reading verse in the right way is steadily growing.

At the request of your programme committee I set forth the theory once more; but the need of brevity will compel the omission of many modifications of importance and interest.

Let us look at three short passages from Roman writers, and consider what follows from them:

1. . . . dactylus, una enim syllaba par est brevibus (. . . longam esse duorum temporum, brevem unius, etiam pueri sciunt); "the dactyl, for in it

¹ Read before the Classical Association of the Middle West and South, St. Louis, May 4, 1906.

² In 1895 I learned from my colleague, Professor Hendrickson, that Professor Usener, of Bonn, read in the same way. In the following spring we met and read to each other, and found a complete identity of method. It is to be regretted that Professor Usener published no papers on the subject.

one syllable is equal to the short ones (. . . a long syllable consists of two units of time, and a short of one, as even children know);" Quintil. ix. 4. 46.

2. Scande versum:

Conticu ere om nes in tenti que ora te nebant
Priscian, *Partitiones duodecim versuum Aeneidos*; Keil III. 469. 15.

3. T. Livius hexametri exordio coepit: Facturusne operae pretium sim,
"Livy begins with the opening of an hexameter;" Quintil. ix. 4. 74.

From these three passages alone, even if there were not a multitude of others, we might learn the most important features of Roman quantitative pronunciation, and of the relation of prose and verse.

From 1, with its definition¹ of the values of longs and shorts, and of the nature of the dactyl, it follows that the first syllable of the dactyl *conticu-* in 2 *took up as much time in utterance as the second and third syllables together*. But the vowel *o* is in itself short. There must have been some *additional* element, on which approximately the same amount of time was spent as upon a short vowel. The only possible additional element is the *n*. In the Roman pronunciation of verse, then, an *n* before a consonant occupied practically as much time as a short vowel. This we could make apparent to the eye by writing the foot as

сōññcū- (equals — ∪ ∪)

The third and fourth feet are *nes in tenti*. Here again we have the same relation of equivalency of length between a short vowel and a consonant in such groups as we are considering. The *i* of *in-* and the *e* of *-ten-* are short. Then the following *n* must take, in each case, one unit of time, with an utterance which might, to our eyes, be suggested by the spelling *innntennnti*. Now, this is not the case with corresponding groups in English. If I say "he did it intentionally," the *n*'s are all heard, but the first two do not take up enough time to make the first two syllables long—commensurate, for example, with such syllables as "fate" or "coast," which are really long. Either, then, our English pronunciation of such consonants is not like the pronunciation of daily Latin speech, or the pronunciation of daily Latin speech was like English pronunciation in this regard, and the pronunciation of Latin verse was strikingly *different* from

¹ Of course the definition was meant only to be a rough one; but of course, also, we may accept it as practically correct. It is echoed again and again by the later grammarians, as by Charisius, Keil I. 11. 15, *in brevi syllaba tempus est unum, in longa duo*, and Diomedes, Keil I. 428. 19, *vocales correptae* (short vowels) *singula obtinent tempora, productae bina*.

that of daily speech. Which is the truth, I leave for the moment in doubt—if, indeed, anyone is capable of entertaining a doubt for that length of time.

The second foot in the same verse from the *Aeneid* is *ere om-*. The second syllable, *om-*, is long. The *o* is again short. Therefore the verse must have been so read that the *m* took about as much time as the *o*. Now, this would be practically impossible if the division of syllables were *o-mnes*, as the Roman grammarians are thought to teach us. It is hardly credible that considerable time should be spent upon the *m*, unless it was pronounced in the same vocal impulse with the *o*, that is, in the same syllable. We must also not fail to notice that Priscian *writes* the *m* with the *o*, and not with the *nes*. He does, in short, precisely that to which our own reasoning brought us a moment ago.

The case is obviously the same with combinations like *ct* or *pt* (as in *iacto*, *aptus*). 'It would be impossible, if one began a syllable with the *c* or *p*, to linger upon the sound. It cannot be heard at all, until the instant before the *t* comes out. The man who should try to *dwell* upon the *c* or *p* would be in the position of the stutterer before he begins to utter any sound whatever. Let anybody try it for himself. The argument as such does not hold, of course, for *s* before another consonant. One *could* spend as much time as one wished over an *s* (as if we should pronounce English *stutter* as *ssstutter*; though nobody does). But, since it is clear that the Romans said *iac-to*, *ap-tus*, etc. (not *ia-cio*, *a-ptus*, etc.), it is morally certain that they correspondingly said *is-te*,¹ for example, and not *i-ste*.

For convenience, let us speak of a consonant coming before another (unless the combination be mute and liquid²) as a *blocked*, or *obstructed*, consonant.

Now, it is just barely conceivable that, while the Romans, as they went about their daily business, pronounced combinations like *mn*, *ct*, *pt*, etc., together and at the beginning of syllables, they might occasionally depart from the ordinary pronunciation of such groups, if they wanted to *force* a certain time-value in a certain spot in verse. But

¹ There is also direct proof from inscriptions and manuscripts.

² The case of mute+liquid is different, and does not belong under our present evidence. The pronunciation of *patres* and *tenebrae*, for example, was ordinarily *pa-tres* and *te-ne-brae*, but might be made *pat-res* and *te-neb-rae* (compare "Pat Ray" and "Bob Reynolds") in verse.

there is not a single place in the classical Roman poetry where a syllable of the kind we are examining is short. It is altogether incredible that the Romans should never once, in the whole range of this poetry, have pronounced such syllables in their *habitual* manner. It follows either that the rule for syllabification which is constantly given us in our Latin grammars (I know of only one grammar in the world, that of Hale and Buck, in which it is not given, and only in West's grammar is any hesitation expressed in giving it¹)—it follows either that this rule, as a rule of pronunciation, was wrong, or that it was not a rule for pronunciation at all, but only for the division of syllables *in writing*, when it became necessary to break a word in two at the end of a line. A very slight examination of the actual statements of the Roman grammarians, which ought to have been made long ago, shows that the latter is the case. The earlier ones say distinctly "when you divide in writing," *cum dividis in scribendo*, *cum dividis in scriptura*, and the like. I have treated the subject, with an irresistible array of evidence, in the *Harvard Studies in Classical Philology* of the year 1896; and Professor Dennison, of the University of Michigan, has recently finished and published² a laborious investigation begun at the same time, proving that the prevailing division of words at the ends of lines in inscriptions is in flat opposition to the rule of the grammarians. There remains only the detailed proof, which I shall sometime give,³ that even the Roman writers of manuscripts, the men who would most naturally have been under the influence of the grammarians, did not divide according to their rule, but according to the principle which I have urged. The

¹ Bennett expresses hesitation in his Appendix, but leaves the traditional statement in the Grammar, even in the imprint 1905.

² "Syllabification in Latin Inscriptions," *Classical Philology* I. pp. 47-68 (1905). A brief summary of the leading arguments of my Harvard paper may be found in Professor Dennison's introduction.

³ I gave the quite conclusive facts from a number of manuscripts (as well as from occasional punctuation between syllables in inscriptions) before the German Archaeological Institute in Rome ten years ago, but have waited for a still larger array before publishing.

Let me add here that, in spite of the correspondingly uniform agreement of writers with regard to Greek syllabification, I have enough evidence already from manuscripts and papyri, in addition to conclusions drawn from Greek versification, to make me strongly incline to believe that, for Greek as well, the grammarians' rule was simply a rule of thumb for the division of words at the end of lines, and not a matter of pronunciation at all.

In an article on "Syllabification in Gothic," *Journal of English and Germanic Philology* XXI. 1 (October, 1906), Mrs. Klara H. Collitz describes the usage in Gothic manuscripts, stating that it differs from Latin usage, but adding in a note at the end that it proves to *agree* in the main with Roman usage as shown in Mr. Dennison's paper (which appeared after she had written), and with my promised statement of the practice of Roman scribes.

only possible explanation of the fact is that the writers were governed by their *pronunciation*. We may accordingly state the doctrine of "length by position" as follows: A syllable made up of a short vowel[†] and one or more obstructed consonants is long (thus *iac-* in *iac-to*).

We pass to the third extract—a passage of high illumination.

If Quintilian, who was an accomplished man and grammarian, and not a vain talker, means anything at all, he means that a person reading these five words of Livy in the way in which one would naturally read them in prose, produced upon the ear the effect of the first four feet of a hexameter. This proves four things:

1. The Roman pronunciation of verse and the Roman pronunciation of prose were essentially the same; for otherwise the latter would not have produced the effect of the former:

This carries with it the answer to the question about the pronunciation of obstructed consonants; e. g., of *m* before *n*, of *c* and *p* before *t*, etc. The passage shows that the pronunciation which we made out for verse was *not* artificial but the pronunciation of daily life—that, at the dinner table, and not merely in a poet's reading, obstructed consonants took substantially as much time as short vowels.

2. The Romans ordinarily slurred in daily speech; for, if they had not, a man reading these words of Livy would not be making hexameter verse.

3. Word-accent was not lost in Roman verse; for if, to make verse of these words, you had to say, not *ôperae prētium* as in prose, but *operaē pretiūm*, then a person reading these words as prose would not be producing upon the ear the effect of verse.

4. Where, in poetry, word-accent and verse-ictus did not coincide, the ictus was slight—not heavier than a reader encountering the same words in prose would *unconsciously give under the influence of the recurring equal and generally similar masses*.

In a word, we may conclude briefly, from this single sentence of Quintilian, that, like prose and verse in all the languages of which we ourselves have any first-hand knowledge, Roman prose and Roman verse were pronounced substantially alike; that, to the reader, the reading of verse was not a matter of versification, but only a matter

[†] The easier form of the rule for the beginner is that a syllable is long if its vowel is followed by two or more consonants (except a mute plus a liquid, or the combination *gn*).

of pronunciation, the poet himself having done the rest. This I have already proved in print, with additional evidence, in a paper¹ read and illustrated before the American Philological Association in 1895. The article is less widely known than the importance of the subject seems to render desirable, as is also my paper given before the Classical Conference at Ann Arbor three years later.² Evidence of this appears, e. g., in the fact that Professor Goodell, of Yale, in an important book published among the Yale Bicentennial Publications,³ put forth the suggestion that word-accent was not lost in Roman poetry,⁴ not knowing, as he afterward wrote me, that this had ever been made before. It appears again in Miss E. H. Du Bois's recent book,⁵ in which, while Professor Bennett's view (to be mentioned presently) is condemned, mine is apparently not even thought of.

It was a great pleasure to me, on the other hand, when a former pupil of mine, Professor Joseph H. Howard, with my hearty consent, published a pamphlet for teachers,⁶ professedly setting forth my theory, with many suggestions for its application. It was a pleasure when Professor Knapp, in his edition of Virgil,⁷ uncompromisingly adopted the system. And it was a pleasure, as well as a surprise, to see the other day that Professor Albert G. Harkness⁸ could say that he took for granted that "accent, such as would exist in prose, is an element of the verse structure," without feeling the need either of an argument of his own on the subject, or of reference to any published argument. This is certainly a change since the time, a dozen years ago, when, at the end of a paper of mine given before the Chicago teachers of Latin, one of them refuted me by saying that he had written to a professor at Harvard (a friend and former colleague of mine, as it chanced) to ask what happened when word-accent and verse-ictus did not coincide, and had been informed that word-

¹ "Did Verse-Ictus Destroy Word-Accent in Roman Poetry?" *Proceedings of the American Philological Association*, 1895.

² Published in *the School Review*, May, 1898.

³ *Chapters on Greek Metric* (Charles Scribner's Sons, 1901).

⁴ I agree with Professor Goodell and others, and have long held, that word-accent was not lost in Greek poetry; and I regret the waste of time which gives the student two conflicting pronunciations for prose and verse, both wrong (e. g., ἀγούμεν as ὤ ὤ ὤ in prose, and ὤ ὤ ὤ in verse, while the actual pronunciation was ὤ - ὤ in both).

⁵ *The Stress Accent in Latin Poetry* (The Columbia University Press, 1906).

⁶ *The Quantitative Reading of Latin Verse* (Scott, Foresman & Co., 1898).

⁷ *Virgil's Aeneid* (Scott, Foresman & Co., 1900). ⁸ *School Review*, November, 1906, p. 642.

accent was lost!¹ Professor Bennett's influence, too (though in his pamphlet on Latin verse² and in the book for teachers in secondary schools by Professor Bristol and himself³ he has not mentioned my view, nor included my paper in his bibliography), is in the same direction. And, indeed, I do not believe that Professor Bennett's actual reading of Latin verse differs from that which he found my best pupils at Cornell practicing when he succeeded me in 1892; for, as regards the one theoretical point of difference—Professor Bennett's doctrine⁴ that ictus was not a matter of stress, but only of the relative importance of a long syllable⁵—I cannot think that the matter goes beyond theory. It is to me incredible—as it is exemplified in living poetry—that, in Professor Bennett's own reading, there should not be a slight stress ictus where there is a steady recurrence of rhythm.⁶

I have shown what a flood of light may be thrown upon Roman pronunciation in prose and verse by three passages from Roman writers. I hope sometime to discuss in full the mass of evidence on these subjects (including slurring and hiatus) presented by the later Roman grammarians, and in still larger quantity by Quintilian, especially in the ninth book, and by Cicero in the *Orator* and the *De oratore*. Meanwhile, let me reinforce the impression which I hope was made above, by translating an additional baker's dozen of selected passages:

1. "For we cannot talk except in long and short syllables; and, from these, feet result."—Quintil. ix. 4. 61.

¹ Skutsch, in the *Krit-Jahresbericht u. d. Fortschritte d. romanischen Philologie* 1890, p. 35, says similarly that in Latin poetry word-accent could not stand where it came into conflict with verse-accent. My Harvard friend now writes me that he has changed his view since the date of the letter referred to.

² *The Quantitative Reading of Latin Poetry* (Allyn & Bacon, 1898).

³ *The Teaching of Latin and Greek in the Secondary School* (Longmans, Green & Co., 1901.)

⁴ Set forth in the article, "What was Ictus in Latin Prosody?" *Am. Jour. Phil.* XIX, pp. 361-83 (1898.)

⁵ I refuted this, as it seemed to me, in my Ann Arbor paper, by showing that in a number of kinds of Roman poetry the ictus often fell upon a short syllable. See also Professor Hendrickson's arguments against Professor Bennett's position and Professor Bennett's reply, *Am. Jour. Phil.* XX.

⁶ Professor Bennett, in discussing my *Art of Reading Latin* in the book on the *Teaching of Latin and Greek*, not only opposed my method, but devoted a couple of pages to showing that a college professor ought not to make suggestions to teachers in the schools with regard to the way in which it might be best for them to teach. Lest that same view should stand in the way of suggestions which I hope to make later, let me say that I took Professor Bennett's injunction the less seriously because he devoted all of his portion of the book except these two pages to making such suggestions himself. The title of the book is *The Teaching of Latin and Greek in Secondary Schools*.

2. "And metrical feet, in fact, so occur in speech that verses of all sorts repeatedly drop from us without our recognizing the fact."—Quintil. ix. 4. 52.

3. "For verse came into existence before the conscious making of verse. Whence the well-known saying, 'the fauns and prophets sang.'"—Quintil. ix. 4. 115.

4. "The words *ut adeas, tantum dabis* would make a bad close, for they are the ending of a trimeter verse; but there follow. . . . It is very bad when a whole verse occurs in prose, and a disfigurement when even a part occurs, especially if the latter part of a verse is made out at the end of a period, or the first part at the beginning. The *reverse* is sometimes agreeable, because the beginning of a verse sometimes makes a very good close, provided it be confined to a few syllables, particularly of the senarius or octonarius. . . . But the beginnings of verses are not suitable for the beginnings of periods (Livy begins with the opening of an hexameter: *Facturusne operae pretium sim*; for this is the way he published it, and it is better than as people emend it). Nor are the ends of verses suitable for the ends of periods, as in the case of Cicero's *Quo me vertam nescio*, which is the end of a trimeter. (Permit me to say trimeter or senarius indiscriminately; for there are six feet, and three beats.¹) The end of an hexameter makes a still worse finish, as in the case of a sentence of Brutus' in the *Letters*: *Neque illi malunt habere tutores aut defensores, quamquam sciunt placuisse Catoni*. The other verses (i. e., *iambic*) are less noticeable, since this kind is very close to ordinary speech. And so whole verses frequently drop from us. Brutus, led by his very anxiety for fine composition, makes them with great frequency, Asinius rather often, and even Cicero sometimes, as in the first words of the oration against Piso: *Pro di immortales, qui huc illuxit dies*."—Quintil. ix. 4. 71.

5. "We often unwittingly utter verses in our orations. This is very bad, but we do not notice them ourselves or hear them. As to iambic verses and choliambic, we can, in fact, hardly escape them; for our speech is largely made up of iambs. These verses are easily recognized by the hearer, since they are of a very familiar kind. We do, however, unwittingly inflict upon our audience others that are less familiar, but are none the less verse—a bad kind of thing, and one that must be avoided by a long look ahead."—Cic. *Or.* 56. 189.

6. "To this class belongs that sentence of Crassus, *missos jacent patronos: ipsi prodeant*. For if Crassus had not made a pause before saying *ipsi prodeant*, he would certainly have recognized that he had uttered a senarius; and, in any case, *prodeant ipsi* would have made a better close."—Cic. *Or.* 66. 222.

7. ". . . when the words are so arranged that the meter (*numerus*) does not seem to have been sought for, but to have followed of itself, as in Crassus' *nam ubi libido dominatur, innocentiae leve praesidium est*. For the succession of the words makes the meter without any apparent art on the part of the orator."—Cic. *Or.* 65. 219.

¹ Quintilian's word is *percussiones*.

8. "And in fact an anapaest goes very well with an anapaest, as being the close of a pentameter, or the meter which has taken its name from it; as, *nam ubi libido dominatur, innocentiae leve praesidium est*; for the synaloepha makes the last two syllables sound as one."—Quintil. ix. 4. 109.

9. "For the running-together of vowels (*coeuntes litterae*) which is called synaloepha, renders speech smoother even than if every word had its full vowel at the end (*suo fine cludantur*)."—Quintil. ix. 4. 36.

10. "And this is so thoroughly preserved by the usage of Latin speech that nobody is so countrified as not to run his vowels together."¹—Cic. *Or.* xlv. 150.

11. "But that is for the Greeks to settle for themselves; *we* are not allowed to keep our sounds apart even if we wish. This is shown by even the unpolished orations of Cato, and by all the poets, except those who, to make the verse come out, often employed hiatus, as Naevius: . . . *quam numquam vobis Grai atque barbari*; . . . and Ennius often: *Scipio invicte*; and even myself once: *hoc motu radiantes Etesiae in vada ponti*."—Cic. *Or.* xlv. 151.

12. "But the same letter (*m*) when it is final and is in contact with the initial vowel of a following word in such a way that it might pass over to it, is, though written, still incompletely pronounced, as in *multum ille* and *quantum erat*, so that it almost gives the effect of a new letter. For it is not removed, but only obscured, and is, as it were, a mark between two vowels to keep them from running together."—Quintil. ix. 4. 40.

13. "For vowels very often coalesce, and certain consonants are obscured in character when a vowel follows. I have given an example of both in *multum ille et terris*."—Quintil. xi. 3. 33.

It is perfectly evident from these passages that the pronunciation of verse was not markedly different from that of prose. In the oration against Piso (4), Cicero pronounced a whole iambic verse; but it is altogether unlikely that he said *illuxit diēs*. In 6, Crassus had actually made iambic verse as far as he went before pausing, though it is certain that he had said *mīssos faciānt patrōnos*, not *missōs faciānt patrōnos*; for it is expressly implied by Cicero that Crassus had not himself recognized what he was doing. In 7, Crassus had made meter (in *-ae leve praesidium est*, — — — — —) and without *seeming*, at any rate, to have intended it; so that he could not have said *innocentiae leve praesidium est*. And it could not be shown more plainly than in 5 that a succession of feet which would have made verse in a poet's production made verse in an oration, and were felt as such by the hearers, though the orator himself might be quite

¹ The manuscripts have *quin nolūt*; but the context shows clearly that this is a scribe's blunder for *qui nolūt*, the reading adopted by almost all editors, and translated above. See Sandys' *Orator*, and, for the subject of the occurrence of verse in prose, Reid's note upon Cicero's *Academica* i. 8. 30.

unconscious of their effect. Word-accent, then, was not lost in Latin verse; and ictus in verse, where it did not coincide with word-accent, was not heavier than the unconscious ictus given in prose where two or more similarly constituted groups occurred in succession.

It is also a clear inference in 7, that in the passage in the oration of Crassus the last two syllables, *um* and *est*, were run together; and this is said point-blank by Quintilian in 8.¹ It is obvious then that, so far as the word *est* is concerned, some kind of a running-together took place when a vowel with *m* preceded. And again, without restriction to a single kind of cases, slurring was plainly not a special device of Latin verse, but the ordinary habit of Latin utterance, just as it is of Italian utterance today. Cicero must have slurred *di* into *immortales* in his opening words against Piso (6), or the effect would not have been that of verse. Further, not only do men who are discussing prose utterance take their examples freely from verse (as Quintilian does in 12 and 13), but the express statement that slurring was the regular usage is made in 9, 10, and 11, with an explicit coupling of prose usage and verse usage ("orations" and "poets") in the last-named passage. Yet, in prose utterance, as in verse, one who wished *might* preserve the full sound of a final vowel under special circumstances, as we know well enough for verse, and as is shown for prose not only by statements in Quintilian which need not be given here, but by the fact that an unslurred *qui* is required to make the iambic verse pointed out in 4 for Cicero's opening sentence against Piso. And finally, it is clearly said in 12 and 13 that some faint sound for *m*, not otherwise occurring, was heard where it preceded an initial vowel.²

¹ The habit is attested in inscriptions by spellings like *bonust* (not, by the way, *bonumst*). The subject is briefly treated by Professor Buck in the Hale-Buck *Grammar* 34. 3. N. The same holds for other vowels before *est*, as shown by frequent spellings both in inscriptions and in certain early manuscripts. Thus *Gallia est* was pronounced *Galliaest* (cf. English "who's it?," "He's it").

² The most probable conjecture is made in the Hale-Buck *Grammar* 34. 2.